Spins and Heat in Nanoscale Electronic Systems (SHINES)

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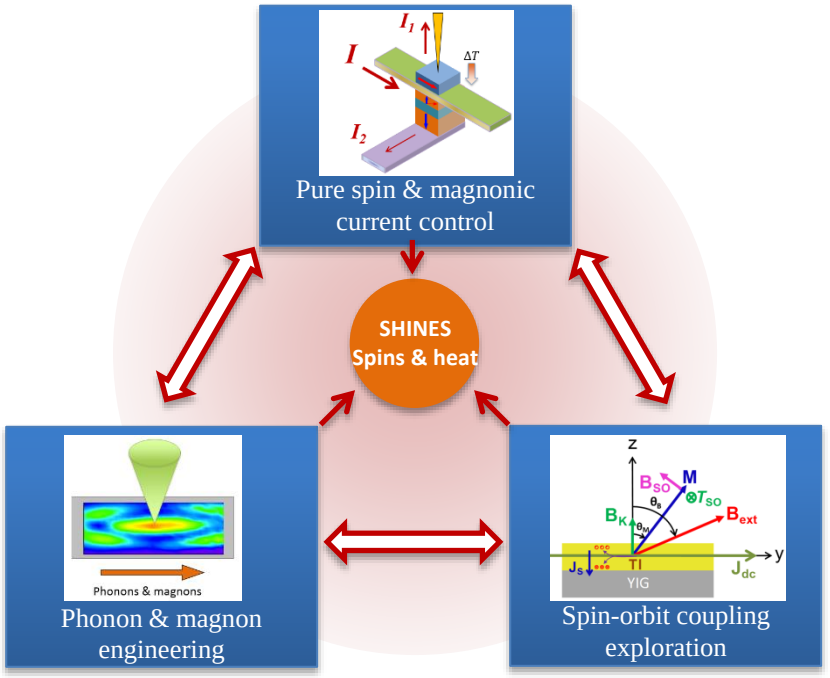
EFRC mission:

To explore the interplay of spin, charge, and heat and to control the transport of spin and energy for achieving significantly higher energy efficiencies in nanoscale electronic devices

http://efrcshines.ucr.edu/



RESEARCH PLAN

Developing better understanding of and significantly improving pure spin current effects in nanoscale electronic devices; engineering acoustic phonon and magnon transport in nano-structured materials via controlling their dispersions and interactions; and exploring spin-orbit coupling for low energy effects and spin superfluidity for dissipationless spin and energy transport.

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